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CLAIMS

1. A watercraft for sail and mechanical operation provided with a displacement hull and a keel, comprising hydrofoil means adapted to only provide lift to the after end of the craft.
2. A watercraft as claimed in Claim 1 in which the lift provided by the hydrofoil means is variable.
3. A watercraft as claimed in Claim 2 in which the amount of lift provided by the hydrofoil means is determined by the speed of the craft.
4. A watercraft as claimed in Claim 3 in which the hydrofoil means is adapted to provide sufficient lift to maintain the craft at a substantially level trim at any speed.
5. A watercraft as claimed in Claim 4 in which the hydrofoil means comprises a substantially rectangular shaped hydrofoil element, in which the shorter sides thereof are disposed substantially parallel to the direction of the hull, and which is adapted to rotate on a transverse axis to provide variable lift to the after end of the craft.
6. A watercraft as claimed in Claim 5 in which the rotation of the hydrofoil element is controlled manually.
7. A watercraft as claimed in Claim 5 in which the rotation of the hydrofoil element is controlled automatically.

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8. A watercraft as claimed in Claim 6 or Claim 7 in which the hydrofoil element is set level to the water flow under the after end of the hull to provide substantially no lift when the craft is sailing.
9. A watercraft as claimed in Claim 8 in which the hydrofoil element can be rotated from a substantially no lift angle level with the water flow under the after end of the hull, to a lift angle of approximately -5 to -8 degrees.
10. A watercraft as claimed in any of the above claims, in which the displacement hull is a mono-hull shaped for high-speed sailing, with a transverse cross-section which tapers downwardly to its keel line, and which increases in cross-section from the bow to a fullest transverse section, and decreases in cross section from the fullest transverse section to the after end, and in which the keel line of the hull tapers downwardly from the bow and the stern to a base line at the fullest transverse section.
11. A watercraft as claimed in Claim 10 in which the hydrofoil element is attached to the underside of the hull by two struts.
12. A watercraft as claimed in Claim 11 which is provided with a drop keel, which is lowered into position to provide ballast when the craft is sailing, and is raised when the craft is propelled mechanically.
13. A watercraft as claimed in Claim 12 in which the keel is provided with a ballast bulb.
14. A watercraft as claimed in Claim 13 in which a recess is provided in the hull, adapted to receive the upper portion of the ballast bulb when the keel is raised.

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15. A watercraft as claimed in Claim 14 which is provided with internal water ballast tanks which can be filled with water when the craft is sailing, and emptied when the craft is propelled mechanically.
16. A watercraft as claimed in Claim 15 in which the hydrofoil element is disposed substantially level with the base line of the hull.
17. A watercraft as claimed in Claim 15 in which the hydrofoil element is disposed substantially level with the base line of the drop keel when it is in its lowered position.
18. A watercraft as claimed in Claim 16 or Claim 17 in which the hydrofoil element is provided with an elongated tear-drop shaped cross-section
19. A watercraft as claimed in Claim 18 in which the struts are provided with rudder elements adapted to steer the craft.
20. A watercraft as claimed in Claim 19 in which the craft is mechanically propelled by an inboard engine provided with an outboard screw propeller.
21. A watercraft as claimed in Claim 20 in which the blades of the propeller are adapted to be rotated to be substantially parallel with the direction of the hull when the craft is in sailing operation to reduce drag.
22. A watercraft as claimed in Claim 21 in which the hull is shaped with a spray rail.

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AMENDED SHEET

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- 23. A watercraft as claimed in Claim 22 in which the watercraft is an approximately 6 berth 13 metre ocean-going yacht.
- 24. A watercraft substantially as described herein and with reference to the accompanying drawings.